Claims:

1. A method of mirroring data to multiple targets where the targets request different data lengths, comprising:

transferring data to multiple targets, if an acceptable data transfer of said multiple targets is greater than 0.

2. The method of claim 1, wherein transferring data to multiple targets comprises: transferring data to all targets.

3. The method of claim 1, and further comprising:

not acting upon a request to transfer data if the request does not raise the acceptable data transfer by said multiple targets.

4. The method of claim 3, wherein not acting upon a request to transfer data comprises:

not acting upon a request if the request does not raise the acceptable data transfer by all targets.

5. The method of claim 3, and further comprising:

transferring data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

6. The method of claim 5, transferring data to multiple targets comprises:

transferring data to all targets.

7. The method of claim 1, and further comprising:

transferring data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

8. The method of claim 7, transferring data to multiple targets comprises:

transferring data to all targets.

9. The method of claim 1, wherein at least one of said multiple targets comprises a storage disk.

10. The method of claim 1, wherein said targets comprise systems that are compliant with the fibre channel protocol.

11. The method of claim 1, wherein said targets comprise systems that are compatible with the fibre channel protocol.

12. A method of mirroring multiple blocks of data to multiple targets, if said multiple targets do not satisfy an amount of data to be transferred of said multiple blocks of data, comprising:

transmitting a write request for half of said multiple blocks of data to said multiple targets.

13. The method of claim 12, wherein said multiple targets comprise all targets.

14. The method of claim 12, and further comprising:

transferring to said multiple targets, half of said multiple blocks of data, if said multiple

targets satisfy said request for half of said multiple blocks of data.

15. The method of claim 14, wherein said multiple targets comprise all targets.

16. The method of claim 12, and further comprising:

transmitting a write request for half of an amount of an immediately previous write request,

if said multiple targets do not satisfy an amount of data to be transferred of said immediately

previous write request.

17. The method of claim 16, wherein said multiple targets comprise all targets.

18. The method of claim 12, wherein at least one of said multiple targets comprises a storage

disk.

19. The method of claim 12, wherein said targets comprise systems that are compliant with the

fibre channel protocol.

20. The method of claim 12, wherein said targets comprise systems that are compatible with the

fibre channel protocol.

21. An article comprising: a storage medium having stored thereon instructions, that, when

executed, result in performance of a method of mirroring data to multiple targets where the targets

request different data lengths, comprising:

transferring data to multiple targets, if an acceptable data transfer of said multiple targets is greater than 0.

22.   The article of claim 21, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transferring data to multiple targets comprising transferring data to all targets.

23.   The article of claim 21, wherein said storage medium has stored thereon instructions that, when executed, further result in:

not acting upon a request to transfer data if the request does not raise the acceptable data transfer by said multiple targets.

24.   The article of claim 23, wherein said storage medium has stored thereon instructions that, when executed, further result in:

not acting upon a request to transfer data comprising not acting upon a request if the request does not raise the acceptable data transfer by all targets.

25.   The article of claim 23, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transferring data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

26.   The article of claim 25, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transferring data to multiple targets comprising transferring data to all targets.

27.   The article of claim 21, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transferring data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

28.   The article of claim 27, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transferring data to multiple targets comprising transferring data to all targets.

29.   An article comprising: a storage medium having stored thereon instructions, that, when executed, result in performance of a method of mirroring multiple blocks of data to multiple targets, if said multiple targets do not satisfy an amount of data to be transferred of said multiple blocks of data, comprising:

transmitting a write request for half of said multiple blocks of data to said multiple targets.

30.   The article of claim 29, wherein said storage medium has stored thereon instructions that, when executed, further result in:

said multiple targets comprising all targets.

31.   The article of claim 29, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transferring to said multiple targets, half of said multiple blocks of data, if said multiple targets satisfy said request for half of said multiple blocks of data.

32.   The article of claim 31, wherein said storage medium has stored thereon instructions that, when executed, further result in:

said multiple targets comprising all targets.

33.   The article of claim 29, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transmitting a write request for half of an amount of an immediately previous write request, if said multiple targets do not satisfy an amount of data to be transferred of said immediately previous write request.

34.   The article of claim 33, wherein said storage medium has stored thereon instructions that, when executed, further result in:

said multiple targets comprising all targets.

35.   A method of mirroring multiple blocks of data to multiple targets, if said multiple targets do not satisfy an amount of data to be transferred of said multiple blocks of data, comprising:

transmitting a write request for a subset of said multiple blocks of data to said multiple targets.

36.   The method of claim 35, wherein said multiple targets comprise all targets.

37.   The method of claim 35, and further comprising:

transferring to said multiple targets, said subset of said multiple blocks of data, if said multiple targets satisfy said request for said subset of said multiple blocks of data.

38.   The method of claim 37, wherein said multiple targets comprise all targets.

39.   The method of claim 35, and further comprising:

transmitting a write request for a further subset of an amount of an immediately previous write request, if said multiple targets do not satisfy an amount of data to be transferred of said immediately previous write request.

40.   The method of claim 39, wherein said multiple targets comprise all targets.

41.   The method of claim 35, wherein at least one of said multiple targets comprises a storage disk.

42.   The method of claim 35, wherein said targets comprise systems that are compliant with the fibre channel protocol.

43.   The method of claim 35, wherein said targets comprise systems that are compatible with the fibre channel protocol.

44.   An article comprising: a storage medium having stored thereon instructions, that, when executed, result in performance of a method of mirroring multiple blocks of data to multiple targets, if said multiple targets do not satisfy an amount of data to be transferred of said multiple blocks of data, comprising:

transmitting a write request for a subset of said multiple blocks of data to said multiple targets.

45.   The article of claim 44, wherein said storage medium has stored thereon instructions that, when executed, further result in:

said multiple targets comprising all targets.

46.   The article of claim 44, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transferring to said multiple targets, said subset of said multiple blocks of data, if said multiple targets satisfy said request for said subset of said multiple blocks of data.

47.   The article of claim 46, wherein said storage medium has stored thereon instructions that, when executed, further result in:

said multiple targets comprising all targets.

48.   The article of claim 44, wherein said storage medium has stored thereon instructions that, when executed, further result in:

transmitting a write request for a subset of an amount of an immediately previous write request, if said multiple targets do not satisfy an amount of data to be transferred of said immediately previous write request.

49.   The article of claim 48, wherein said storage medium has stored thereon instructions that, when executed, further result in:

said multiple targets comprising all targets.

50.   A switch for use in a switched fabric, said switch comprising:

at least a port for coupling to said switched fabric;

a mirroring device capable of mirroring data to multiple targets where the targets request different data lengths;

logic for signal information to pass at least between said port and said mirroring device;

said mirroring device adapted to transfer data to said multiple targets, if an acceptable data transfer of said multiple targets is greater than 0.

51.   The switch of claim 50, wherein said mirroring device is further adapted to transfer data to all targets.

52.   The switch of claim 50, wherein said mirroring device is further adapted to not act upon a request to transfer data if the request does not raise the acceptable data transfer by said multiple targets.

53.   The switch of claim 52, wherein said mirroring device is further adapted to transfer data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

54.   The switch of claim 50, wherein said mirroring device is further adapted to transfer data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

55.   The switch of claim 50, wherein at least one of said multiple targets comprises a storage disk.

56. The switch of claim 50, wherein said targets comprise systems that are compliant with the fibre channel protocol.

57. The switch of claim 50, wherein said targets comprise systems that are compatible with the fibre channel protocol.

58. The switch of claim 50, wherein said switch comprises a first switch;

and further comprising:

a second switched coupled to said first switch to form a switched fabric.

59. A switch for use in a switched fabric, said switch comprising:

at least a port for coupling to said switched fabric;

a mirroring device capable of mirroring multiple blocks of data to multiple targets, if said multiple targets do not satisfy an amount of data to be transferred of multiple blocks of data:

logic for signal information to pass at least between said port and said mirroring device;

said mirroring device being adapted to transmit a write request for a subset of said multiple blocks of data to said multiple targets.

60. The switch of claim 59, wherein said multiple targets comprise all targets.

61. The switch of claim 59, wherein said mirroring device is further adapted to transfer to said multiple targets, said subset of said multiple blocks of data, if said multiple targets satisfy said request for said subset of said multiple blocks of data.

62. The switch of claim 61, wherein said multiple targets comprise all targets.

63.   The switch of claim 59, wherein said mirroring device is further adapted to transmit a write request for a further subset of an amount of an immediately previous write request, if said multiple targets do not satisfy an amount of data to be transferred of said immediately previous write request.

64.   The switch of claim 59, wherein said multiple targets comprise all targets.

65.   The switch of claim 59, wherein at least one of said multiple targets comprises a storage disk.

66.   The switch of claim 59, wherein said targets comprise systems that are compliant with the fibre channel protocol.

67.   The switch of claim 59, wherein said targets comprise systems that are compatible with the fibre channel protocol.

68.   A switched fabric comprising:

    a first switch; and

    a second switch coupled to said first switch, said second switch including:

        at least a port;

        a mirroring device capable of mirroring data to multiple targets where the targets request different data lengths;

        logic for signal information to pass at least between said port and said mirroring device;

said mirroring device adapted to transfer data to multiple targets, if the minimum

acceptable data transfer of said multiple targets is greater than 0.

69.   The switched fabric of claim 68, wherein said mirroring device is further adapted to transfer

data to all targets.

70.   The switched fabric of claim 68, wherein said mirroring device is further adapted to not act

upon a request to transfer data if the request does not raise the acceptable data transfer by said

multiple targets.

71.   The switched fabric of claim 70, wherein said mirroring device is further adapted to transfer

data to multiple targets if a request for data transfer raises the acceptable data transfer by said

multiple targets.

72.   The switched fabric of claim 68, wherein said mirroring device is further adapted to transfer

data to multiple targets if a request for data transfer raises the acceptable data transfer by said

multiple targets.

73.   The switched fabric of claim 68, wherein at least one of said multiple targets comprises a

storage disk.

74.   The switched fabric of claim 68, wherein said targets comprise systems that are compliant

with the fibre channel protocol.

75.   The switched fabric of claim 68, wherein said targets comprise systems that are compatible with the fibre channel protocol.

76.   A switched fabric comprising:

a first switch; and

a second switch coupled to said first switch, said second switch including:

at least a port;

a mirroring device capable of mirroring multiple blocks of data to multiple targets, if said multiple targets do not satisfy an amount of data to be transferred of multiple blocks of data;

logic for signal information to pass at least between said port and said mirroring device;

said mirroring device being adapted to transmit a write request for a subset of said multiple blocks of data to said multiple targets.

77.   The switched fabric of claim 76, wherein said multiple targets comprise all targets.

78.   The switched fabric of claim 76, wherein said mirroring device is further adapted to transfer to said multiple targets, said subset of said multiple blocks of data, if said multiple targets satisfy said request for said subset of said multiple blocks of data.

79.   The switched fabric of claim 78, wherein said multiple targets comprise all targets.

80.   The switched fabric of claim 76, wherein said mirroring device is further adapted to transmit a write request for a further subset of an amount of an immediately previous write request,

if said multiple targets do not satisfy an amount of data to be transferred of said immediately previous write request.

81.   The switched fabric of claim 76, wherein said multiple targets comprises all targets.

82.   The switched fabric of claim 76, wherein at least one of said multiple targets comprises a storage disk.

83.   The switched fabric of claim 76, wherein said targets comprise systems that are compliant with the fibre channel protocol.

84.   A network comprising:

   a host;

   a physical storage unit;

   a first switch; and

   a second switch coupled to said first switch and forming a switched fabric, said first switch and said second switch coupled to said host and said physical storage unit, said first switch including:

      at least a port;

      a mirroring device capable of mirroring data to multiple targets where the targets request different data lengths;

      logic for signal information to pass at least between said port and said mirroring device;

      said mirroring device adapted to transfer data to multiple targets, if the minimum acceptable data transfer of said multiple targets is greater than 0.

85.   The network of claim 84, wherein said mirroring device is further adapted to transfer data to all targets.

86.   The network of claim 84, wherein said mirroring device is further adapted to not act upon a request to transfer data if the request does not raise the acceptable data transfer by said multiple targets.

87.   The network of claim 86, wherein said mirroring device is further adapted to transfer data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

88.   The network of claim 84, wherein said mirroring device is further adapted to transfer data to multiple targets if a request for data transfer raises the acceptable data transfer by said multiple targets.

89.   The network of claim 84, wherein at least one of said multiple targets comprises a storage disk.

90.   The network of claim 84, wherein said targets comprise systems that are compliant with the fibre channel protocol.

91.   The network of claim 84, wherein said targets comprise systems that are compatible with the fibre channel protocol.

92.   A network comprising:

a host;

a physical storage unit;

a first switch; and

a second switch coupled to said first switch and forming a switched fabric, said first switch

and said second switch coupled to said host and said physical storage unit, said first switch

including:

at least a port;

a mirroring device capable of mirroring multiple blocks of data to multiple

targets, if said multiple targets do not satisfy an amount of data to be transferred of multiple

blocks of data;

logic for signal information to pass at least between said port and said

mirroring device;

said mirroring device being adapted to transmit a write request for a subset

of said multiple blocks of data to said multiple targets.

93.   The network of claim 92, wherein said multiple targets comprise all targets.

94.   The network of claim 92, wherein said mirroring device is further adapted to transfer to said

multiple targets, said subset of said multiple blocks of data, if said multiple targets satisfy said

request for said subset of said multiple blocks of data.

95.   The network of claim 94, wherein said multiple targets comprise all targets.

96.   The network of claim 92, wherein said mirroring device is further adapted to transmit a write request for a further subset of an amount of an immediately previous write request, if said multiple targets do not satisfy an amount of data to be transferred of said immediately previous write request.

97.   The network of claim 92, wherein said multiple targets comprise all targets.

98.   The network of claim 92, wherein at least one of said multiple targets comprises a storage disk.

99.   The network of claim 92, wherein said targets comprise systems that are compliant with the fibre channel protocol.

100.   The apparatus of claim 92, wherein said targets comprise systems that are compatible with the fibre channel protocol.